

three to four days, but unfortunately it was attacked and killed by red ants. It was preserved as a dry specimen in the College Museum.

So far as the author is aware this insect forms the first record of the species from Junagadh in Saurashtra.

BAHAUDDIN COLLEGE,
JUNAGADH,
February 25, 1954.

I. H. KACHHI

44. ON SOME UNRECORDED HOST PLANTS OF THE LAC
INSECT, *LACCIFER LACCA* (KERR), (HOMOPTERA :
LACCIFERIDAE)

Watt¹ (1901) published the first comprehensive list of host plants of the common Indian lac insect, *Laccifer* (= *Tachardia*) *lacca* (Kerr) and enumerated 56 species occurring in India, Burma and Ceylon. In 1910, Stebbing² increased this number to 88, and as our knowledge of the subject advanced further additions were made by several workers so that at present well over hundred species of host plants are known.

The following notes on three species of hitherto unrecorded host plants of *L. lacca* are based on my observations made in Chota Nagpur while I was working as Entomologist at the Indian Lac Research Institute, Namkum. Specific identifications of the lac insects were made at the Zoological Survey of India, Calcutta, during the course of a systematic study of the family Lacciferidae, and I am grateful to Dr. S. L. Hora, Director of the Survey, for providing facilities for the same. Names of two of the plants were supplied by Sri K. S. Srinivasan of the Botanical Survey of India, Calcutta, to whom my thanks are due for his help.

It will be noted that all the three species of plants dealt with here are of exotic origin and have been growing in the country as avenue and garden trees for sometime past. In the lists of host plants given by Watt, Stebbing and others fair numbers of exotic plants were included. That exotic species could be important from the point of lac production is indicated by the fact that in Thailand the Rain Tree [*Samanea* (*Pithecolobium*) *saman* Merrill], a native of tropical South America, is a major source of Thai lac which is coming up fast in competition with the Indian lac in foreign markets.

1. *Acacia auriculiformis* A. Cunn. (Leguminosae : Mimosaceae).

Lac incrustations were observed on a number of branches of a solitary tree in a private garden compound at Ranchi, in October, 1952. Thin branches of nearly half an inch diameter were covered with thick incrustations some of which were easily six inches long. The resinous secretion was thick and light amber in colour; wax

¹ Watt, G. (1901): *Tachardia* (*Carteria*) *lacca*, Kerr. Lac (lakh) and the lac industries. *Agric. Ledger* (Ent. Ser. No. 9), Calcutta, pp. 181-347 + i-ix.

² Stebbing, E. P. (1910): A note on the lac insect (*Tachardia lacca*), its life-history, propagation and collection. *Indian For. Mem. (For. Zool. Ser.)*, 1 (3): 33-114 (1-82).

filaments were also relatively long and suggested a healthy state of the lac insects embedded in the incrustations. The females were full of developing eggs and the swarming of larvae took place by the end of October. The strain concerned was apparently *rangeeni*.

The infection seemed to have been brought about either by accident or through the agency of birds which may carry nymphs on their bodies from one tree to another. It was generally believed that this tree easily succumbs to the attack of the lac insect in the course of a few seasons if the infection is not destroyed in time.

A. auriculiformis is a native of Northern Australia and Queensland and is cultivated in several parts of India. Isolated trees occur in private garden compounds at Ranchi.

2. *Peltophorum ferrugineum* Benth. (Leguminosae: Mimosaceae).

Nearly a score of trees of this species were observed to carry lac at Jamshedpur in June, 1952. The lac infection varied from rather scattered cells on thick branches ($\frac{3}{4}$ inch diameter) to thick and continuous incrustations on relatively thinner branches ($\frac{1}{4}$ - $\frac{1}{2}$ inch diameter). There were no incrustations near the tips of branches as most of the larval settlements seem to have died prematurely. The scattered cells, referred to above, were almost spherical while the cells constituting the incrustations were a little longer along the vertical axes than along the horizontal. The quantity and colour of the resin secreted compared favourably with that generally obtained from a palas (*Butea monosperma* Kuntze) tree. There being two broods in a year, the swarming of lac larvae took place once in July and then in October. The trees were being self-infected as the contractor who had obtained the right to collect lac from these and other trees such as the Rain Tree, the peepal (*Ficus religiosa*), the siris (*Albizia lebbek* Benth.), growing along the avenues, obviously took care to leave intact a sufficient number of branches bearing mature lac to serve as a source of infection for the next brood. Owing apparently to the constant strain of infection and frequent lopping, the trees showed signs of deterioration.

P. ferrugineum is a native of the Eastern Peninsula and Ceylon and is frequently planted in several parts of India. In Chota Nagpur it is often planted along the roads in several towns.

3. *Jacaranda mimosifolia* D. Don. (Bignoniaceae) (Syn. *J. ovalifolia* R. Br.).

One tree of this species was carrying the lac infection at Jamshedpur. The incrustations were sparse to moderately thick but in most other respects it was similar to that described above for *P. ferrugineum*. The infection of lac appeared to have spread to this species from a nearby hedge of *Inga dulcis* Willd. which was carrying lac. At the time of my visit in June 1952 many infected branches had been cut down in order to save the tree. Subsequently a tree in the author's compound at Ranchi was also successfully infected.

Mahdihassan³ (1936) was able to rear *Laccifer* (= *Lakshadia*) *communis* (Mahd.) by artificial infection on this species at Bangalore.

³ Mahdihassan, S. (1936): The range of host selection and specific differentiation of lac and other parasites. *Arch. Naturgesch.* N.F., 5: 1-22.

A native of Brazil and of somewhat recent introduction in India, the trees *J. mimosifolia* may be seen in private and public gardens.

ZOOLOGICAL SURVEY OF INDIA,
34, CHITTARANJAN AVENUE,
CALCUTTA-12,
June 25, 1954.

A. P. KAPUR
M.Sc., Ph.D. (Lond.), D.I.C.

45. PRESUMPTIVE FATAL STING OF THE COMMON HOUSE WASP, *POLISTES HEBRAEUS*

Here in Dehra Dun, on July 17, 1954, at 16.05, I.S.T., a lady aged 63 years was stung by a yellow house wasp, *Polistes hebraeus*; between the 3rd and the 4th toe of her right foot. She became very restless and complained of breathlessness. Medical aid was promptly summoned. On arrival, at about 16.17 the doctor gave the lady an injection of Adrenalin. She expired almost immediately—only 12 minutes after being stung.

It is a fact that the lady was unusually sensitive to wasp sting. On previous occasions when stung by a wasp she used to feel a great deal of pain all over her body and also complained of a choking sensation. She was slightly asthmatic—an injection of Adrenalin, however, used to give her prompt relief.

This case appears to be unique as no one here seems to have heard of a similar one.

16, RAJPUR ROAD,
DEHRA DUN, U.P.,
August 2, 1954.

J. N. ONIAL,
P.F.S. (Retd.)

46. SOME INSECTS ATTRACTED TO LIGHT

The following insect species were taken at light in Bangalore from 20th October to 5th November 1953. They were caught inside a study room into which they entered through an eastern window (4 ft. x 2 ft.), 5½ ft. above the ground level, and overhung by an electric light (25 W, 50 C, 220 V, 5 A), the illuminated filament being visible from outside. The wide range of species obtained is of considerable interest, when the visual stimulus in insects is known to be complex and the form and magnitude of the response variable from species to species with the location and the intensity of illumination, length of exposure period, degree of light or dark adaptation, time of day, and temperature (Dethier, 1953). Of the 90 species collected, as many as 33 are of economic importance, and these are indicated by an asterisk. No comprehensive list of insect species attracted to light appears to be available in the Indian literature, although Lefroy (1909), Dina Nath (1923) and Ayyar and Anantanarayanan (1934) recorded certain common examples along with the principal families whose members showed positive phototropism; light-traps have, however, been a favourite experiment with economic entomologists for the control of some major crop pests (Ayyar and Anantanarayanan,